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Information/Action

Educator Preparation Committee

Dual Certification for Single Subject and Designated Subjects Career Technical Education Teaching Credentials

Executive Summary: This study session reviews California's history of credentialing CTE teachers and identifies current issues impacting the supply of CTE teachers. It also presents recommendations from a CTE workgroup intended to address the shortage of CTE teachers and increase opportunities for students to participate in experiential and work-based learning.

Recommended Action: Adoption of the CTE Workgroup recommendations.

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Strategic Plan Goal

II. Program Quality and Accountability

a) Develop and maintain rigorous, meaningful, and relevant standards that drive program quality and effectiveness for the preparation of the education workforce and are responsive to the needs of California's diverse student population.

Dual Certification for Single Subject and Designated Subjects Career Technical Education Teaching Credentials

Introduction

Career Technical Education (CTE) has been the subject of numerous pieces of legislation in the last decade as part of an effort to expand access to and significantly update CTE programs in the public schools. Career technical academies have expanded to the point that the state is now facing a shortage of CTE teachers. Recommendations to increase credentialing options for CTE teachers were brought to the Commission during the December 2016 Commission meeting. Staff was asked to provide additional background information on CTE credentials and the history of CTE in order for the Commission to make a more informed decision on how to increase the supply of credentialed CTE teachers.

Background

In 1993 the Commission adopted the first standards for vocational education teacher preparation pursuant to advisory panel recommendations. These standards defined a two-level program of preparation to be completed over a five year period. In 2005 the State Board of Education adopted the first CTE Standards for K-12 students; the CTE Model Curriculum Standards. This required the Commission to review and update the CTE CTE Model Curriculum Standards. In February 2007, the Commission established the CTE Advisory Panel to recommend changes that would increase teacher supply, streamline credential requirements, and improve the quality of preparation to teach CTE courses in California. On August 7, 2008, the Commission adopted new Designated Subjects CTE Standards recommended by the CTE Advisory Panel.

Several pieces of legislation that have been signed into law within the last decade have had a significant impact on shaping the nature of CTE offered as part of the secondary schooling that prepares students to be both college and career ready. Additionally, recent legislation has focused on the academic achievements of CTE students and strengthening the vocational education classes of yesterday into the progressive technical education programs that are designed to meet the needs of today's workforce. The following two bills played a significant part in the shaping of current CTE courses and programs.

Senate Bill 52 (Chap. 520, Stats. 2007)

On October 12, 2007, Senate Bill (SB) 52 (Scott) was signed into law. This bill addressed the need for a new designated subjects credential that is focused on the career pathways identified in the California CTE Model Curriculum Standards. Because the bill was an urgency bill, its provisions became law effective immediately upon enactment. The law did the following:

 Changed the name of the credential from Designated Subjects Vocational Education Credential to the Designated Subjects Career Technical Education (CTE) Teaching Credential.

- Required the Commission to establish a list of authorized subjects for the CTE credential by September 30, 2007, that reflected the 15 industry sectors identified in the California CTE Model Curriculum Standards adopted by the State Board of Education.
- Eliminated the requirement that candidates for the CTE credential pass the California Basic Educational Skills Test (CBEST).
- Eliminated the option for the Commission to test a candidate for the CTE credential in the subject to be taught.
- Required that individualized preparation programs be consistent with full-time or part-time service. (Subsequent legislation has eliminated the full-time/part-time service distinction. All candidates must satisfy the same requirements.)
- Required the Commission to convene an advisory committee to review CTE credential requirements and make recommendations for consolidating requirements for full-time and part-time service with a focus on streamlining the CTE credential structure without increasing the requirements for part-time service.
- Required the Commission to make recommendations to the Legislature on the minimum requirements for the CTE credential by April 1, 2008.

Senate Bill 1104 (Chap. 576, Stats. 2008)

In September 2008, SB 1104 (Scott) was enacted, establishing specific terms and requirements for CTE Credentials.

- Limiting the submission of CTE credential applications to Commission-approved CTE programs only. This change was necessary because the connection of new CTE teachers to Commission-approved programs was not taking place when all LEAs were able to recommend for a preliminary CTE credential.
- Reducing the number of years of work experience necessary to be eligible for a CTE credential
 from five years to three years. The Commission further relaxed the work experience
 necessary by redefining a year of experience as a minimum of 1,000 hours rather than the
 1,500 previously used to define a year.
- Reducing the term of the preliminary CTE credential from five years to three years, thus
 decreasing the amount of time an individual will teach in a CTE classroom without having
 completed the CTE preparation.
- The US Constitution requirement was moved to the Clear credential level.

Additionally, prior to SB 1104, the CTE credential had different requirements for individuals who would teach full time and those who would teach part time. The part time teachers completed approximately half of the preparation as the full time CTE teachers. SB 1104 eliminated those differences so now part-time and full-time teachers all meet the same requirements.

Preliminary Credential Requirements and Terms

Requirements	Prior to SB 1104 (2008)	Established by SB 1104 (2008)			
High School Diploma or Equivalent	Yes	Yes			
Passage of Basic Skills Exam	Yes	No			
Health and Computer Education Coursework	Yes Not for preliminary, require for Clear Credential				
Industry Work Experience	5 Years; 1500 hours per year	3 Years; 1000 hours per year			
Recency of work experience	Within the last 3 years	One year within the last 5 years or Two years within the last 10 years			
Options that Allow Different Levels of Work Experience	None	 Three additional options: Completions of 48 semester units of postsecondary vocational training = 2 years Advanced Industry Certification = 1 year One year of full-time teaching = 1 year maximum 			
U.S. Constitution Requirement	Yes	Required for clear credential			
Credential Recommendation	An employer or the preparation program	Only the approved preparation program sponsor			
Preliminary Credential	Valid for 5 years	Valid for 3 years			

Industry Work Experience

Since the passage of SB 1104 (2008) the *three years of industry experience* required for the Preliminary CTE Teaching credential has been broadened and made more flexible especially for those who hold a general education teaching credential:

- A candidate who has 24 or 48 units of postsecondary vocational training in an appropriate field may substitute for one or two years, respectively, of industry work experience.
- A candidate who has earned an Advanced Industry Certificate, as defined in Title 5 regulations, may substitute one-year of industry experience.
- A candidate who has taught on a general education credential for a year or more may substitute one-year of industry experience maximum.

No matter how a candidate satisfies the three years of required industry experience, at least one of those years must be actual industry work experience in the field since this credential is built upon the foundation that the industry experience has provided to the individual.

The requirements for the clear credential were also modified by SB 1104. The path to a Clear CTE credential has two options: 1) teach successfully for two years while holding the Preliminary CTE credential, or 2) complete advanced coursework as defined in the <u>program standards</u>. The majority of candidates teach for two years to earn the Clear CTE credential.

Clear Credential Requirements and Terms

Requirements for Clear Credential	Prior to SB 1104 (2008)	Established by SB 1104 (2008)
Valid Preliminary Credential	Yes	Yes
Program Completion	 Level 1 and 2 of preparation: 180 hours or 12 units (Part-time teachers were required to complete 90 hours or 6 units) Health and Computer Education 	 Preliminary CTE program: 135 hours or 9 units of coursework SDAIE instruction Health and Computer Education
Additional Requirements		US Constitution

Assembly Bill 86 (2014) and Assembly Bill 104 (2015)

In 2014 AB 86 was passed which created the California Careers Pathways Trust (CCPT) which provided \$250 million to school districts, county superintendents of schools, charter schools, and community college districts in the form of one-time competitive grants to integrate standards-based academics with a career-relevant, sequenced curriculum following industry-themed pathways that are aligned to high-need, high-growth, or emerging regional economic sectors. This was followed by the passage of AB 104 (2015) which created the California Career Technical Education Incentive Grant (CTEIG) as a state education, economic, and workforce development initiative with the goal of providing high school students with the knowledge and skills necessary to transition to employment and postsecondary education. The purpose of this program is to encourage the development of new CTE programs and enhance and maintain current CTE programs during implementation of the local control funding formula (LCFF)².

These laws provide funding for local education agencies to offer more CTE courses and to develop additional pathways programs. The changes put in place by SB 52 (2007) and SB 1104 (2008) are aligned with the more recent efforts in that the credential structure is aligned with the 15 industry sectors and aligned with the State Board of Education's adopted curriculum standards to prepare all students to be college and career ready. While both of these funding opportunities were very well received by the CTE community, they have driven the need for qualified CTE teachers to an all-time high.

Many programs are not able to take advantage of the available funds because of their inability to attract qualified CTE teachers. As programs became more frustrated about CTE teacher shortages, they began to contact the Commission to see if alternative methods of certifying CTE teachers could be developed. Based on the direction of the Commission at the <u>June 2016 meeting</u>, staff worked with the California Department of Education (CDE) to assemble a group of CTE stakeholders to collaboratively identify recommendations that would increase the number of available Career Technical Education teachers.

¹ Source: California Department of Education - http://www.cde.ca.gov/ci/ct/pt/index.asp

² Source: California Department of Education - http://www.cde.ca.gov/fg/fo/r17/cteig15ins.asp

CTE Courses and Teacher Supply

The demand for CTE teachers was relatively stable for two or three years after the new credential requirements were established, but in 2012-13 the need for CTE teachers started to grow, as districts began to take advantage of additional funding that was available. As a result, CTE went from one of the credential areas that had sufficient teachers to one that was in dire need of more teachers.

CTE Teaching Credential Recommendations*

	2010-11	2011-12	2012-13	2013-14	2014-15
Preliminary	1,105	998	1,053	1,223	1,591
Clear	548	507	846	866	504
Total	1,653	1,505	1,899	2,089	2,095

^{*} It is important to note that for CTE teachers, the number of new Preliminary credentials issued indicates the number of new individuals teaching in CTE classrooms while the number of Clear credentials issued indicates the numbers of individuals who have completed the CTE teacher preparation program and have taught for two years.

The CDE's Dataquest provides course data for the most recent three years. The table below provides information on the number of courses and the estimated full time equivalent (FTE) for each of the 15 industry sectors. In California, SB 52 specified that CTE courses in public schools and CTE credentials would be organized according to the 15 industry sectors. The 15 industry sectors are identified in the table below. In the majority of industry sectors there has been an increase in the number of CTE teachers. The largest industry increases are in Information and Communication Technologies, followed by Marketing, Sales, and Service. Five of the 15 industry sectors have seen a reduction in the estimated FTE over the three years.

Career Technical Education Courses and Enrollment by Industry Sector, 2012-13 to 2014-15

	2012-13		2013-14		2014-15		% change in Estimated
Subject	Number of Courses	Estimated FTE	Number of Courses	Estimated FTE	Number of Courses	Estimated FTE	FTE (2012- 13 to 2014- 15)
Agriculture and Natural Resources	3,695	541	4,015	608	4,176	643	19%
Arts, Media, and Entertainment	6,552	957	6,680	995	7,068	1,041	9%
Building and Construction Trades	2,503	355	2,317	342	2,385	341	-4%
Business and Finance	7,887	888	6,394	700	6,006	692	-22%
Education, Child Development, and Family Services	5,261	562	5,461	569	5,382	560	0%
Energy, Environment, and Utilities	530	81	481	75	439	71	-12%

	2012-13		2013-14		2014-15		% change in Estimated
Subject	Number of Courses	Estimated FTE	Number of Courses	Estimated FTE	Number of Courses	Estimated FTE	FTE (2012- 13 to 2014- 15)
Engineering and Architecture	1,868	281	1,949	310	2,171	354	26%
Fashion and Interior Design	740	77	757	78	731	74	-4%
Health Science and Medical Technology	3,080	317	2,972	333	3,396	369	16%
Hospitality, Tourism, and Recreation	3,712	460	3,632	457	3,883	471	2%
Information and Communication Technologies	1,664	245	3,643	510	4,348	620	153%
Manufacturing and Product Development	2,062	287	1,531	217	1,699	240	-16%
Marketing, Sales, and Service	1,013	97	1,520	151	1,346	149	54%
Public Services	1,721	150	1,504	156	1,745	153	2%
Transportation	2,223	245	2,217	249	2,395	252	3%

The State Board of Education has defined how CTE courses should be organized and what should be taught through the CTE Model Curriculum Standards. The standards provide guidance for individual courses and pathway programs. The California Department of Education (CDE) is responsible for administering Perkins Funding in California. The CDE has many resources to assist LEAs in understanding the requirements related to Perkins Funding. When the Perkins funding was reauthorized in 2006, the CDE developed a state plan to administer the federal funds. One of the challenges is that CTE courses can only be supported by Perkins Funding when the teacher holds a CTE credential.

Workgroup Recommendations

The following are the proposals that the CTE workgroup felt would have the greatest impact on easing the CTE teacher shortage while ensuring the professional expertise of these teachers was not lost. These proposals were seen through the lens of trying to retain as many of the current CTE teachers as possible and attracting more qualified candidates.

The workgroup identified four strategies that could broaden the pool of qualified CTE teachers and ease CTE teacher shortages. Each recommendation is followed by staff analysis and questions for the Commission to consider.

1. Provide Single Subject Teachers with an Alternate Route to Gaining 1000 Hours of Industry Experience

Single Subject teachers interested in pursuing a CTE credential do not necessarily have the required number of industry hours required for the preliminary CTE credential. The workgroup suggests that these teachers be permitted to acquire the necessary industry experience over an extended period of time while concurrently teaching CTE courses.

For those Single Subject teachers who do not have the required work experience, creating a CTE document, such as a permit or a CTE intern credential, would allow the individual to teach CTE courses while accumulating the needed industry experience during the school year and the summers. This would assist schools in being able to recruit and develop their CTE teachers from their current staff. If this permit allowed these teachers to complete a CTE Foundations course and accumulate 250 industry experience hours their first year, they could apply for this one year permit again, and as long as they gained 250 hours of industry experience each year, they could continue to apply for the permit, until they had all the required hours.

The workgroup tried to balance the need for more CTE teachers with the fact that industry experience is what makes the CTE teacher unique and allows them to teach all the required skills and make the course a true career technical education course with real life experiences. They believe that lowering the number of hours could water down the expertise and uniqueness of the CTE teacher and thereby undermine the rigor of industry based CTE courses. On the other hand, allowing someone to work towards those additional hours would still give them that expertise and ensure their relevance in the classroom. This CTE proposal could be implemented with changes to Title 5 Regulations.

Staff Analysis

The workgroup suggested that if a single subject teacher has a minimum of 250 hours of industry experience, the individual could teach on an intern type CTE credential (this document does not exist now and would need to be developed) and earn the remaining hours (up to 1,000 if the individual has an advanced industry certification or sufficient units in the field or up to 2,000 hours if not). For the December 2016 agenda item, staff suggested that a minimum of 500 hours of industry experience would be more appropriate if the Commission is interested in implementing this process. If the Commission implements this recommendation, staff requests that the Commission decide how many hours of industry experience should be required for the initial CTE permit.

2. Support Current Clear CTE Credential Holders to Earn a Single Subject Teaching Credential

Because CTE programs are often not large enough to support full-time CTE teachers, part-time CTE teachers often leave teaching to find full-time positions within the industry. If the CTE teacher were able to teach in the related single subject field, the work group believes that many would continue to teach. Additionally, this would not only strengthen the school's CTE program, but create a more integrated pathway for academic instruction to be delivered.

The current requirements for a CTE teacher to earn a single subject credential are the same as for anyone else coming into the profession with no experience. These requirements include:

- 1) completion of a baccalaureate degree,
- 2) satisfaction of the basic skills requirement,
- 3) verification of subject matter competence,
- 4) satisfaction of the Developing English Language Skills requirement, including the Reading requirement by completing a comprehensive reading instruction course,
- 5) completion of the U.S. Constitution requirement,
- 6) completion of a Commission-approved teacher preparation program including successful student teaching, and
- 7) pass of a teaching performance assessment (TPA).

These requirements currently give the CTE teacher no credit for past years of successful teaching experience.

With this in mind, the workgroup proposes the Commission consider giving Clear CTE credential holders the opportunity to add a Single Subject credential, using their CTE teaching experience as an indicator of their qualifications. If the CTE credential holder has a bachelor's degree, satisfies the basic skills requirement, verifies subject matter competence, and successfully completes the TPA, the workgroup is recommending they be recommended for a Clear Single Subject credential.

A concern to some is that CTE teachers will be able to earn a single subject credential "the easy way," by only having to complete one or two classes and the TPA. However, others feel that successfully teaching CTE courses for a number of years adequately shows that the candidate has all the other required teaching skills. While this is similar to a Single Subject credential holder obtaining a second single subject credential (Title 5 Regulation §80499), enacting this proposal would require changes to Title 5 Regulations.

Staff Analysis

Single Subject teacher candidates are required to complete coursework and field experiences that usually range from 30-50 semester units. The purpose of the coursework is to ensure that the candidate understands the age group that he or she will be teaching, understands how to teach the specific content, how to work with English learners and support their learning, as well as how to work with families and the community to support the students, school, district, and community.

A CTE preparation program is limited to nine semester units or 135 hours. Within the program, CTE teacher candidates learn about classroom safety, the foundations of CTE, and strategies for teaching English learners. The requirements related to teaching English learners are significantly less than what a general education teacher is required to complete. In addition to the workgroup recommended requirements, staff suggests that it might be appropriate for the CTE teacher to complete a course on teaching English learners so that the CTE teacher is eligible for the

authorization to teach English learners that general education teachers receive when they complete a preliminary preparation program.

3. Allow Community College CTE Instructors Teaching Experience To Be Used to Earn a Clear CTE Teaching Credential

Although CTE instructors at community colleges are teaching similar curriculum as high school CTE teachers, they are not authorized to teach in the high school setting. There may be community college CTE instructors who would be interested in teaching some courses at a local high school, but currently they would be required to start from the beginning to obtain a CTE credential, even though they could have years of CTE teaching experience. Besides not receiving the recognition they feel is due for teaching at a community college, the workgroup stated that for many community college instructors the requirements to earn a CTE teaching credential far outweigh the benefit of teaching one or two courses that the local high school would like them to teach.

An issue that was raised regarding this proposal is that community college instructors may not possess all the necessary skills to work with adolescents and their parents. The workgroup suggests that a pedagogy course could address those issues. The workgroup proposes that the Commission allow community college CTE instructors to obtain a Clear CTE teaching credential based on two years of teaching CTE at the community college level, passing a pedagogy course and completing the U.S. Constitution requirement. This CTE proposal could be implemented with changes to Title 5 Regulations.

Staff Analysis

The Clear CTE credential includes an authorization to teach English learners in the CTE classroom. Staff suggests that teaching English learners is a priority in California and that if community college instructors are teaching in the public schools, the instructor should have completed the preparation to understand how to teach English learners. Additionally, all individuals who hold a credential or other document from the Commission are required to complete the Professional Fitness review which includes a background check with the California Department of Justice and the Federal Bureau of Investigation. Staff suggests that this be included as a requirement within this recommendation.

4. Encourage CTE Foundations Courses to be added to Preliminary Single Subject Teaching Programs

The workgroup proposes that the Commission strongly encourage preliminary Single Subject teacher preparation programs to offer CTE Foundations courses in order to expose teacher candidates to the CTE credential option. This proposal came about after several workgroup members spoke about going to their local high schools to talk to Single Subject teachers about CTE opportunities. They were all surprised by the number of teachers that knew very little or nothing about CTE, and those that did know usually thought CTE was simply shop and home economics classes. If Single Subject teachers had more knowledge of CTE courses, many might qualify for a CTE credential and apply for the credential. This would help schools take advantage

of new staff's industry experience, strengthen their CTE program and enrich non-CTE courses with real world applications.

Staff Analysis

Because of the voluntary nature of this recommendation, it is unclear as to what impact it would have on the shortage of CTE teachers. To implement this recommendation, information would need to be provided to preliminary Single Subject programs regarding including CTE Foundations information in their program. Because all institutions do not sponsor CTE programs, interested institutions would also need to become approved to sponsor CTE preparation. If the Commission takes action to implement this recommendation, staff would work with interested Single Subject preparation programs to assist them in becoming approved to offer the CTE preparation.

CTE Across the Nation

A national report on CTE teacher supply was recently released, *The State of Career Technical Education: Increasing Access to Industry Experts in High Schools*³. In reviewing this report, it was apparent that several states engaged in the same struggle to identify, prepare, and credential more CTE teachers and are pursuing similar solutions to those recommended by the workgroup. The report referenced another report by Advance CTE with support from six non-profit organizations, *Putting Learner Success First: A Shared Vision for the Future of CTE* ⁴. This report has identified five overarching principles for improving America's education system and achieving career readiness for all students. The Commission reviews the requirements for different types of credential programs on a schedule and the Designated Subjects program standards are scheduled for review within the next few years. When work begins to review the full CTE credential requirements this resource should be included.

Staff Recommendations

Staff recommends that the Commission adopt the recommendations of the CTE workgroup and direct staff to take next steps toward implementation of the following proposals.

Proposal 1: Provide Single Subject Teachers with Alternate Route to Gaining 1,000 Hours of Industry Experience

- Single Subject teacher must have 500 of hours of industry experience—The Commission could specify a different number of hours to be eligible for the initial new CTE permit
- Teacher qualifies for CTE permit which allows teacher to teach a CTE course while earning additional 250 hours of professional experience throughout the year or during the summer
- Teacher must complete the CTE Foundations course during first year on the CTE permit
- Teacher must reapply for CTE permit annually and a minimum of 250 hours of professional experience must have been completed to be eligible for renewal

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³ https://cte.careertech.org/sites/default/files/files/resources/State_of_CTE_Industry_Experts_2016_0.pdf

⁴ https://cte.careertech.org/sites/default/files/Vision FinalWeb.pdf

Proposal 2: Support Current Clear CTE Credential Holders to Earn a Single Subject Teaching Credential

- Must hold a Bachelor's degree or higher
- Verify subject matter competence (CSET or an approved program)
- Satisfy Basic Skills Requirement
- Successfully complete a Commission-approved TPA

Staff recommends that the individual be required to complete the coursework for teaching English learners that other general education teachers are required to complete.

Proposal 3: Allow Community College CTE Instructors Teaching Experience to Be Used to Earn a Clear CTE Teaching Credential

- Must be teaching CTE courses at a community college
- May use two years of college teaching experience as the two years of experience needed to earn a Clear CTE credential
- Is excused from the CTE teacher preparation program but must complete a pedagogy class in the content area as defined in the CTE program standards
- Must complete the U.S. Constitution requirement
- Must complete the professional fitness review

Staff recommends that the community college instructor be required to complete coursework in teaching English learners and earn the authorization to teach English learners as defined by the CTE program standards.

Proposal 4: CTE Foundations Course Added to Single Subject Teaching Programs

• Institutions offering Preliminary Single Subject teacher preparation programs should be encouraged to offer CTE Foundations courses to their current Single Subject credential candidates and become approved CTE program sponsors.

Next Steps

If the Commission adopts one or more of the workgroup's recommendations, staff will bring forward proposed language for adoption, prepare any regulatory packages, and provide technical assistance appropriate to the changes.